



IARTEM e-Journal Volume 4 No 2

Volume 4 Number 2

Judging the quality of educational materials – a research project on student voice

Jo Dargusch, Nayadin Persaud & Mike Horsley
Central Queensland University
Australia

Abstract

This article reports a research project investigating student voice in the judging of published educational materials. Students' opinions of the quality of educational materials that are used for teaching and learning purposes in classrooms do not feature in the research into educational materials. Multiple data sources were accessed, both qualitative and quantitative, including: focus group data, interviews, group judging processes, students' score sheets, and judges' short-listed and winning titles. This article concludes that there is significant alignment between the views of students and publishers as to what constitutes quality teaching and learning materials, and that students interpret the quality of materials by aligning materials to their own prior knowledge. Further, students developed agency in the use of the metalanguage of evaluation in relation to educational materials.

Key words: educational publishing materials, student voice, judging, application of quality criteria, publishing industry.

I think that the authors should give their books firstly to their children to read them and learn from them. I believe this is a way of testing them. If their children are able to read and understand them, we will be able to read and understand them as well (int. 29, 12 years old).

Introduction

This paper provides insights into students' views on the quality of published educational materials. Specifically, it reports the findings of a project that involved students from two Queensland schools in judging published educational materials produced for Australian primary school students and teachers in 2009 and 2010. Students are key stakeholders in school education (Wood 2003), yet their voices are rarely accessed in discussions of curriculum, pedagogy and teaching and learning resources. This is not to say that students are excluded from classroom-focused research, for there is a growing focus on the voice of students in school reform contexts (Bland & Atweh, 2007; Groundwater-Smith & Mockler, 2003; Mitra, 2009) and emphasis is given to the importance of consulting students about their schooling experiences.

The same concern with student voice is not evident in the field of educational materials research. This is despite evidence suggesting that textbooks and teaching and learning materials are "the single most important medium which pupils and teachers believe contributes most to learning" (Crawford, 2002, p. 2). It is also despite research that links school success rates and the availability of textbooks (Seguin, 1989, cited in Crawford, 2002), key considerations for parents, schools and governments. Some attention has been given to student engagement with history textbooks in a secondary school context (Crawford, 2002), and the uses that are made in the classroom of history textbooks linking learning to textbook use. Scant attention, however, has been given to students' views on the quality of published educational materials that form part of the everyday classroom context. This study allows access to 'insiders' voices on quality, linked to their experiences with educational materials. The key research question, therefore, is: What do students say about the quality of educational materials? This is a critical question for publishers, teachers, curriculum developers and educational policy makers.

A second area of focus in this study is the alignment of student perceptions of the quality of educational materials with those of other stakeholders. The Australian Awards for Excellence in Educational Publishing (AAEEP) were employed as an authentic context to facilitate not only the examination of students' views, but of their judgement of educational materials. The AAEEP make a public determination of the quality of digital and print teaching and learning materials such as textbooks and teaching and learning materials that are produced to support Australian teachers and learners. The awards have grown to be the major event in educational publishing in Australia.

Students were asked to conduct judging in the same way as professional judges of the Awards, using the same process and criteria. The results of these judgements were compared with those of the professional judges who undertook the national

judging of the Awards for 2009 and 2010. A second research question, therefore, asked how aligned students' perceptions were with those of professional judges. Also of interest was whether the metalanguage of quality evaluation and judging entered student discourse after the students had completed the judging process, and was used by them in discussions with their teachers about the teaching and learning resources that were provided by the school.

Several non-research outcomes were met during the project. The schools viewed it as an opportunity for literacy enrichment for their students. The student judging of the materials entered into the AAEEP provided a real purpose for advanced reading and writing. It also provided a real purpose for evaluation and synthesis, two higher-order thinking processes (Bloom, 1956), and the introduction and use of the metalanguage of quality evaluation. The project also involved opportunities for professional development about educational publishing resources for the teachers involved.

The project was conducted in Australia. This provides a particular context for the discussion of published educational materials and, specifically, published textbooks. Australia has a free textbook market, with materials purchased by schools and teachers. The purchase of textbooks, or of particular textbooks and materials, is not mandated at any policy level. Australian teachers are encouraged to prepare their own lesson resources. This has led to a reliance on photocopying in lesson preparation (Horsley, 2011); photocopied sheets are common lesson and homework resources. Textbooks are less frequently used than in other nations, and low priority is given to them in curriculum and funding (Horsley & Wikman, 2010). While a discussion of the use of textbooks in Queensland is outside of the parameters of the study, the study takes place in a context which does not emphasise the use of textbooks in the classroom. The extent to which this influences students' evaluations of the materials is unknown.

Design of the research

The study had a user-centred design in keeping with the focus on student voice. A range of data (and evidence) was collected about:

- Students' perceptions about the quality of educational materials and resources developed for them;
- Students' perceptions about the criteria developed to measure the quality of educational materials;
- Students' use of these criteria; and
- The impact of the use of these quality criteria on the students themselves.

The research was designed around replicating the judging process of the AAEEP in two Queensland primary schools in 2009 and 2010. In the professional judging of the AAEEP prior to 2003, the chief judge convened primary, secondary and university judging panels that comprised independent experts; retired and freelance publishers, teachers, students, researchers, and representatives of key stakeholders such as the sponsoring bodies. The demands of the judging process and a desire to incorporate publishers' knowledge more directly into the operation of the awards led

to a change in the judging process, based on publisher peer review. Currently, judging the competition is a peer review process. The judges are nominated to the APA by the leading Australian publishers and selected by the chief judge. Judges serve for three years. Judge briefing and training is undertaken by the chief judge. Over 40 senior Australian publishers, approximately half who have been teachers have been judges in the awards since 2005. The quality criteria and their application are a shared understanding in Australian publishing.

The awards are structured around four categories of *primary*, *secondary*, *technical* and *university education* published teaching and learning resources. Within each main category, sub categories of resource types reflect the nature of the Australian educational publishing industry. Sub-categories include single titles, teacher reference, teaching and learning packages, textbook series, websites and scholarly reference titles. The process of judgement, therefore, involved students in **judging resources from the primary category**, across the range of sub-categories available to primary teachers.

Students judged books from the 2009 and 2010 Awards. 78 titles were judged by the professional judges in 2009 and 72 titles in 2010. Short-listed titles and winners were chosen. At the same time students from two primary schools, School A and School B, also followed a similar judging process, short-listing titles and choosing winners from that short-listing. The titles they selected to be short listed and win the primary sub categories were then donated to the students' schools. Both the professional judges responsible for the awards and the students involved in the research project used the same criteria to measure and rank the quality of teaching and learning materials.

Quality criteria

First established in 1994 the judging criteria have been remarkably stable since the inception of the awards. There are currently 9 judging criteria:

1. importance of the market
2. clarity of writing
3. pedagogical underpinning and implications
4. nature and quality of the supporting illustrations
5. appropriateness of page layout and design
6. representation of the discipline
7. publishing contribution of the publication to the discipline
8. quality of the subject matter
9. innovation and flair

The judging criteria two to eight were developed through a meta-evaluation of characteristics of texts that afford learning during 1994 (Horsley, 1994). Criterion one was added in 1999 through discussion in the Australian educational publishing industry (Horsley, 2007). Criterion nine was developed to frame the original and initial reason for the development of the awards - to promote innovative and leading edge educational publishing. The quality criteria are accepted by the Australian Publishing Industry. Alternative quality criteria have been developed in other awards for textbooks and educational materials – most notably the European School Book of

the Year conducted by the European Publishing Group and reflecting total quality management (TQM) approach.

Judging process for the Australian Awards

The peer review judging in the Australian Awards – applying the quality criteria – is a three stage process. In the first stage publisher judges (in the **primary** category, this involves a panel of 5 judges) are briefed by the Chief Judge and a judging simulation is held. In the second stage the individual publisher judges view the entries individually and apply the quality criteria to each individual entry in each category in a judging period of about three weeks. In the third and final stage of the judging process the judges convene in panel with the chief judge. They discuss their deliberations and negotiate a consensus position on the short listed titles and the winners of the sub-categories. At this stage the judges prepare a statement for inclusion in the catalogue of short listed and winning titles that is circulated to all school and public libraries in Australia.

Illustration 1 Front page of the annual catalogue of the short-listed and winning titles of the AAEEP.



The year

2009

In 2009 the Awards received over 215 entries, with the largest categories by entry and in order being secondary single title, tertiary single title, primary teaching and learning, and tertiary scholarly reference categories. In 2009, there was an even distribution between primary, secondary and tertiary entries. The judges worked extremely hard to apply the judging criteria and to select the titles meeting the benchmarks reflected in the Awards criteria.

The Australian Educational Publishing Awards commenced in 1994 when the Australian Publishers Association, together with the Teaching Resources and Textbook Research Unit (TREAT), now at Central Queensland University Australia, and the *Australian* newspaper established the Awards in nine categories. Today the Awards seek to recognise excellence in publishing in almost thirty categories and across all facets of educational publishing.

Judging of the Awards is a rigorous process, spanning a number of weeks, culminating in the selection of the shortlisted and winning titles. The contribution of experienced industry professionals and TREAT to the judging process is a testament to their dedication to the industry.



Overall winner

Sharing Our Stories

Author: Liz Thomson and the people of six Aboriginal communities
Publisher: Pearson Australia

For this series, author and photographer Liz Thomson lived with six indigenous communities to record and develop the stories and art. This is an original series that will play an important role in preserving Aboriginal stories and language. It has enormous learning value as a stand-alone Indigenous Studies resource or alongside any literacy or social studies resource.



AUSTRALIAN PUBLISHERS ASSOCIATION

30 years producing books in Australia
1979-2009

Ligare



Judging process for the students and schools

The judging process for the students was structured to replicate the national awards judging process in terms of process and use of criteria. After discussions with the principals and senior school staff and communication with the parents, a four step judging process was developed. A number of seminars were held with the students by the researchers and teacher nominated to manage the project in the schools, and to facilitate student judging and progress.

In the *first* step of the process 25 students in each school interested in being part of the project were identified and permission gained from parents for them to take part. In the *second* step these students were provided with 2 x 2-hour-long seminars. The first focused on the judging criteria for the awards and the second involved the students in a trial application of these criteria to the 2009 and 2010 titles. In the *third* step students formed pairs and applied the quality criteria to all the titles over a two month period (which included the school holidays). Students entered their comments and judgements to a project spreadsheet that calculated their scoring of the application of the criteria to different titles. In the *fourth* step the 25 students came together, forming a judging panel to discuss and negotiate consensus on their short listed and winning titles. They made comments on the quality of the teaching and learning materials and the use of the quality criteria. Students also came to a consensus about the titles that they would choose to be donated to the school by the research team.

The schools and the students participating in the project

Two schools participated in the project. School A, Blue Skies State Primary School (pseudonym), is a large, government-run primary school situated in a large coastal community. School B, St Mike's Primary School, is a medium-sized non-government primary school situated in a regional centre. The project emerged from significant partnerships between the university and the schools that included pre-service teacher training, the employment of school staff as part of the university's Education faculty, and previous research projects between university and school staff.

The students participating in this research project comprised high level literacy achievers from Years 5 and 6 in the two primary schools. Two or three high literacy achievers from each class were nominated by the class teachers to take part in the project. The students contributing to the project were described by their teachers as:

- Learners with initiative and confidence;
- Independent self-managed learners;
- Learners with high level literacy skills and academic achievement.

The students were withdrawn from class to participate in morning workshops and seminars but conducted most of the reading required in pairs in their own time. Each school provided a location for the materials, a teacher who supported and managed the project in the school and a borrowing system for students to take home and share materials and a dedicated spreadsheet to enter the results of the judging.

Research methodology

The choice of mixed methods methodology for the study was influenced by the nature and complexity of the research questions: *What do students say about the quality of educational materials?*; and *How aligned are students' perceptions with those of professional judges?* The research team took account of Creswell and Plano Clark's description (2007, p. 5) of the usefulness of mixed methods research in providing a "better understanding of research problems" than either qualitative and quantitative approaches alone, when choosing a research methodology. It was decided that this study would benefit from the collection and analysis of data, the

integration of findings, and the drawing of inferences from both methods in combination, to strengthen the study's findings.

In keeping with the focus of the study on student voice, it was necessary to gather data that provided access to students' views on textbooks. The research focused, therefore, on developing two data sets based on collecting records of student voice; and data on the process of students' application of quality criteria to judging. Data set 1 comprises student focus group transcripts (one for each site); transcripts of the judging process (one for each site); and interview data about the quality of the titles short-listed by the students (2 students for each site). Data set 2 comprises the student scores from the application of quality criteria to the titles entered into the awards. Hard copies of the score sheets (appendix X) were collected (25 for each site), and provided evidence of the titles short-listed by the students.

The two data sets provided data to be analysed quantitatively and qualitatively. The decision was taken that data should be gathered in order to answer the primary research question—What do students say about the quality of educational materials?—with the emphasis on describing students' evaluations. Data in the form of the short-listed titles and designation of winners of sub-categories by the students, provided opportunities for qualitative analysis through compared with the short-listed titles of the professional judges.

Focus groups were a key focus of the research, used to open up “opportunities to capture in-depth data” (Colucci, 2007, p. 1422). Their interactivity meant that they opened up group consensus and group differences, with opportunities for students to provide different and contradictory opinions. The focus groups were used to encourage students to describe their judgement processes, and their perceptions of what was valued and valuable in classroom texts. Data included: score sheets; digital recording of focus groups and interviews; pre-interview questions; photographs of whiteboard summary of voting results.

Students were asked to record their judgements on the score sheets, thus replicating the judging process of the professional judges. The score sheets have designated criteria by which students will make judgements about individual published resources. The score sheets provide a general continuum of standards from 5-1, and require students to make judgements not only about the texts, but about the meaning of the standards themselves.

Table 1 – Data sets

Data Set 1	1. Student focus group transcripts
Qualitative	(one for each site);
data from	2. Transcripts of the judging process
multiple	(one for each site);
sources	3. Interview data about the quality of
	the titles short-listed by the students

	(2 students for each site).
Data Set 2 Quantitative data	1. Student score sheets 2. Number of titles shortlisted and chosen winners per category by both professional judges and students.

Illustration 2 – Student judging criteria sheet

CQUniversity Noosa – State School Book Judging Challenge

Judging Criteria Sheet 5 – 4 – 3 – 2 – 1
(Highest number = best rating)

Title of series: Reading Eggs

Category: Literacy Series

Name of Student:

	Criteria	Score:
1	Market	3
2	Clarity of writing	3
3	Learning & teaching	4
4	Quality of Images	4
5	Layout and design	4
6	Subject	3
7	New & Original	3
8	Quality of Content	4
9	Exciting	2
	TOTAL	29

Project hypotheses

Prior to data analysis a number of hypotheses were conceptualised to guide the analysis of data. Given their previous work in the area of classroom pedagogy and textbook use, the researchers came to the project with named assumptions and biases. The use of mixed methods allowed the researchers to go beyond the verification of their assumptions as identified by Flyvbjerg (2011). Six hypotheses were identified:

1. *That there would be a 50% correlation (quite high) between the student and professional judges selection of short listed and winning titles. i.e. different stakeholders would have significantly similar views of the quality of the published educational materials.*

2. *That the major differences in application of criteria would be in the area of titles aimed at students, but higher alignment in areas such as teacher references and teaching and learning packages.* Research on the professional judges (Horsley, 2007) showed that judges framed ideas about the use of materials in classrooms when they applied the criteria. It was argued very strongly that understandings about the use of publications, and the context of their use, was critically important in the judging process. It was felt that students and judges would have similar views about teacher reference materials but that students would frame quality criteria differently in relation to materials written specifically for the students.
3. *Application of the criteria would be similar in both judging episodes.* It was hypothesised that both students and professional judges would use metrics and scores in similar ways, but that they both would base their analysis on professional judgment that was tested in discussion. They would keep an open mind and listen to other judges.
4. *Student judges would appropriate the metalanguage of judging and use this metalanguage of quality criteria with teachers and students generally and particularly in discussion of teaching and learning materials in school.* It was hypothesised that both sets of stakeholders would use the metalanguage of the judging criteria to anchor their discourse of educational material quality.

1. Data analysis and key findings – student focus groups and interview data integrated with student scores

The analysis across the data sets was interrelated, with Data set 1 (focus groups and interview data) integrated with part of the group and interview data from Data set 2 (student scores and the list of titles short-listed). The score sheets were examined to look at how students used the quality criteria in terms of how they distributed scores differently for different texts, and how they used the judging standards 1-5 to represent their understanding of quality in a particular text. The focus groups were used to encourage students to describe their judgement processes, and their perceptions of what was valued and valuable in classroom texts and educational materials.

Digital audio-visual recordings of the focus groups, the judging process and the interviews were fully transcribed and coded. Due to the rich nature of the interview data, the decision was taken to code manually. This included using a basic coding process of thematic, manual coding to identify and summarise segments of data (Denzin & Lincoln, 2011) according to general themes that arose in the data, emerging in the form of frequently appearing words and phrases to describe the short-listed and winning resources. This was done by colour-coding sections of text. The focus group transcripts were conducted separately for each school. These codes were broad, but were related to the purpose of presenting students' views on published resources.

The thematic codes for both schools were essentially the same: illustrations; text; subject matter; information; interactive/inclusive of other people/; suitability of others; and knowledge. Analysis of the data also included coding passages of text to each of

the thematic codes, providing extra, descriptive detail about the significance of each of the codes.

The researchers then compared the results from the two schools. As can be seen above, there was a high level of correlation between the thematic codes. A decision was taken at this point to synthesise the data from both schools, providing the researchers with an overview of themes and descriptive detail. The emergence and identification of these themes was important to the description of these students' judgements. The coding of the themes was suggested by the data itself, with emphasis given to the inductive production of these codes. The completed analysis was represented using mindmap web application tool that allowed connections to be shown between codes and particular data, and to show repetition.

From a student's perspective the quality of teaching and learning materials is focussed around seven core constructs. These constructs originate from the way that students evaluate teaching and learning materials for their own purposes in learning. As a result knowledge is a critical construct related to what they know and what they may be required to learn. Students used statements like "thought-provoking" and "practical" and "hard to understand" and "easy to read" as a way of framing the possibility of these materials to support them to learn core concepts and skills. Highly aligned with the construct of knowledge was the construct of subject matter. Comments about the subject matter tended to align with comments about knowledge, but also including aspects of motivation to learn. For example, "great story", "terribly boring", "taps into interest area". Students' comments about subject matter also reflected the potential of the materials to help student learn, but from a motivational reference point.

The other core constructs/themes that arose from this analysis was the role of layout and illustrations and the way information was presented to either afford or constrain learning new subject matter and transferring the knowledge in the students' disciplinary schemas. The student comments about layout, illustration and design reflected these affordances and constraints: *"easy to fill in at a desk"*, *"could be improved to make more sense of content"*, *"print too small"*, *"text in bold highlights key concepts"*.

The students employed the zone of actual and proximal development in framing their comments for materials related to concepts skills within their prior learning. They made comments about how it could help others learn, and its suitability for other students' learning. For concepts and skills outside their prior learning the comments reflected the ability of the materials to assist them to learn these new concepts and skills.

2. Data analysis and hypothesis testing – student and professional judge choices and behaviour as judges

The analysis of results is discussed here against the hypotheses proposed earlier.

1. That there would be a 50% correlation (quite high) between the student and professional judges selection of shortlisted and winning titles

Table 2 - Comparisons of professional and student judging outcomes

	Blue Skies Primary 2009	St Mike's Primary 2010
No. of titles	71	52
No. of categories	6	6
No. shortlisted by Publishing Award judges	25 (35%)	22 (42%)
No. shortlisted by students	36 (50%)	13 (25%)
Shortlisted titles in common	12 45%	10 45%
Common winners	2	2

In 2010 there was a 45% alignment between the short listed titles selected by the judges and the students. In 2009, the alignment was 48%. This result confirms the original hypothesis that there would be a 50% alignment between the judges and students in relation to their judgement of publishing quality when applying the criteria. Of the winners selected for the six categories, there was a 33.3% alignment between judges and students. Of the six categories, the judges and students selected two common winners in each year.

2. That the major differences in application of criteria would be in the area of titles aimed at students, but higher alignment in areas such as teacher references and teaching and learning packages.

It was hypothesised that there would be closer alignment between judges and students' views in categories aimed at teacher references and learning packages than in publications aimed at students. The data revealed that this was not the case. There was much greater alignment in judges and students' selections aimed at student reference than teacher reference. The reason for this can be understood in that many professional publishing judges have been teachers with a strong understanding of students' prior learning at each stage of education. When students and teachers judge materials written for students they are viewing the materials through the prism of students' prior learning. In making judgements on teacher references the students and teachers' prior learning is markedly different in relation to providing advice for teachers on how to approach teaching and learning in a range of subject areas. However, the students did express very strong views from their perspective about the teacher reference materials that they read, interpreting these materials from a student perspective rather than a teacher perspective.

3. Application of the criteria would be similar in both judging episodes

The judges and students basically applied the criteria and conducted judging in similar ways. Both judges and students applied the criteria by a similar process and reached consensus in discussing the merits of publications and in deciding on a short list. One of the researchers is the chief judge of the AAEEP. His perception is

that the application of the criteria by both the professional AAEEP judging panels and the student judging panels were remarkably similar. The same process of individual and group discussion prior to whole group consensus decision-making was followed in almost the same way in both contexts. *Both groups of judges changed their minds after discussion and gave consensus their fullest attention.*

4. *Student judges would appropriate the metalanguage of judging and use this metalanguage of quality criteria with teachers and students generally and particularly in discussion of teaching and learning materials in school.* The analysis of the focus group data indicates that they did indeed appropriate the key concepts. There was evidence, however, that this was an interpretive process, with students using some of the same, but some different language to describe their understanding of quality. They do not strictly employ just the terminology of the judging criteria as separate elements, but tended to see them as interrelated and overlapping. Table 3 indicates the correlation and overlap between the criteria and the themes identified in the data. Teachers at the schools in discussions three months or more after the student judging indicated that the students who had been involved in judging used the metalanguage of the judging in making comments to teachers about the teaching and learning materials that were used in classes, the teaching and learning materials in the library and what future choices teachers should make in either making teaching and learning materials or purchasing them.

Table 3 – Alignment of judging criteria and student talk

Judging criteria	Overlapping/correlating themes in student data
Importance of the market	Suitability to others/subject matter
Clarity of writing	Information/layout
Learning and teaching	Knowledge/subject matter/interactivity
Nature and quality of supporting illustrations	Layout
Appropriateness of page layout and design	Layout
What does the publication say about the subject	Subject matter
Publishing contribution	Information/subject matter
Quality of the subject matter	Subject matter/knowledge
Innovation and flair	Interactivity/Information

3. Data analysis and student voice – interview data from students

This section features the student voice from one student involved in the qualitative components of the project which conducted interviews with students and focus groups with students about the quality of teaching and learning materials and how they should be judged. Lisa (pseudonym) was in year 6 when the study commenced. She was identified by her teacher as an ideal candidate for the study because she is a high achieving student who scored well above the national testing average in the

NAPLAN literacy testing. According to Lisa the most important features of a textbook are: interesting information; colours; good quality information (its importance to the subject); interesting layout; looks attractive; not too overwhelming; appealing; and pictures need to be relevant to the subject.

One important aspect of research that the interview highlighted was the metalanguage of quality evaluation and judging internalised by Lisa that framed her discourse. Lisa was able to recall various judging criteria from the original judging criteria sheet. When discussing illustrations, Lisa stated that the qualities that make a good illustration are, “colourful, detailed and interesting”. She elaborated that bright colours look more appealing. She felt that textbook covers that were illustrated with great detail and very colourful were appealing.

In giving advice to authors and publishers, Lisa stated that the quality of information was very important, “...if you want to know about the subject you are learning about...like say if it was about Japan you would want to know about culture, food, and people and not just about one thing...”. Lisa expressed during the interview the importance of putting “appropriate information and relevant pictures”. The layout of a textbook was also discussed in detail. Lisa noted that pages in a textbook should, “be kind of a mix like some information and then pictures to go with that...’cause it’s kinda better ‘cause you are sorta splitting the text up”. She goes on to mention that it is important to spread the pictures and information out in textbooks for younger children.

In regards to features that assist with helping students learn difficult concepts Lisa identified three ways that the features of the materials could afford learning: illustrations; index; and glossary. Lisa also felt that textbooks can enhance student learning through design and layout: “tiny writing makes it (information) a bit confusing so if they have larger writing that would make it easier like the headings too”. When asked about how publishers could make teaching and learning materials in a difficult subject interesting, Lisa replied, “...they could put like little fun facts and they could use interesting and different pictures.” Lisa’s feedback reveals that the language involved with the judging criteria and critical analysis she learned during the study was retained many months after the judging and research was completed.

Conclusion

This study is one of the few pieces of research that have accessed student voice in exploring and examining how different educational stakeholders conceptualise and judge the quality of teaching and learning materials. The study occurred in naturalistic school settings, involved over fifty high-achieving literacy students and replicated the National Awards for Educational Excellence in Publishing in such a way that student voice on the quality of materials could be researched. Despite this, the study does present a number of limitations.

In the first instance the study took place in primary school sites only, with a limited number of student participants. In the second instance, the study researched the judgement of quality outside of the use of materials for actual student learning. The students were asked to judge and make comment on materials that they were not directly using in their classrooms. However, the study did use high literacy

achievement students who were only too anxious to read hundreds of new primary titles and make comments on their efficacy for the learning of themselves and others.

The study made a number of significant findings. First, there is a significant alignment between the views of students and publishers as to what constitutes quality teaching and learning materials and of the features which may afford learning present in these materials. The research showed that students quickly appropriate the language of judging the quality of teaching materials and in many cases their articulated judgements could not be distinguished from professional judges drawn from the publishing industry who, in many cases, had previously been teachers. The second major finding is that the students interpreted materials from a position where they aligned the materials to their own prior knowledge. For materials within their prior knowledge the students made comments about the affordances and constraints of the features of the materials for the learning of other students. For materials outside their prior knowledge that required new learning the students commented on the affordances and constraints of the features of the materials that would assist them to learn. This view is also expressed strongly when professional judges drawn from publishing also discuss the materials and the way they may support and advance learning.

Third, the process of judging the quality of the materials is very similar amongst different stakeholder groups; in this case, students, publishers and teachers. Fourth, students who undertook the judging in this research project developed significant agency in terms of the teaching and learning materials that their teachers used in their classes and used the metalanguage of evaluation to directly contest the materials provided for them by teachers.

One major benefit of the study is to further conduct research into the views of students about how to judge the quality of materials that have been written for them. The research represents an early step on the road to developing insights into the ways in which students apply quality criteria to textbooks and teaching and learning materials and their understanding of what is valuable and desirable in such materials. The research has addressed, in a preliminary way, a number of crucial research questions that deserve more sustained research. These include: How do students judge the quality of textbook materials?; What characteristics do students value in textbooks?; How do students make judgements about textbooks?; What criteria do students prioritise when talking about textbooks?; How do students apply criteria to textbooks?; and How do students account for the judgements they make on textbooks?

We encourage others to develop research to address these significant research issues.

References

- Bland, D. & Atweh, B. (2007) Students as researchers: engaging students' voices in PAR. *Educational Action Research* 15 (3) pp. 337-349.
- Coluci, E. (2007). "Focus Groups Can Be Fun": The Use of Activity Oriented Questions in Focus Group Discussions. *Qualitative Health Research*, 17 (10), 1422-1433.
- Crawford, K. (2002). *Pupil Engagement with History Textbooks: some preliminary thoughts on a "deafening silence"*. Edge Hill College: United Kingdom.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Denzin, N.K. & Lincoln, Y.S. (Eds.) *The Sage Handbook of Qualitative Research*, 4th Edition. Thousand Oaks, CA: Sage.
- Flyvbjerg, B. (2011). Case study. In N. K. Denzin & Y. S. Lincoln, (Eds.) *The Sage Handbook of Qualitative Research*, pp. 301-316, 4th Edition. Thousand Oaks, CA: Sage.
- Groundwater-Smith, S. & Mockler, N. (2009). *Teaching Professional Learning in an Age of Compliance: Mind the Gap*. Springer: Holland.
- Horsley, M. (1994). *A meta-evaluation of textbook features that may afford learning*. (Unpublished paper). Teaching Resources and Textbook Research Unit. University of Sydney: Sydney.
- Horsley, M. (2007). Explorations in the economy of prestige: Textbook competitions and the judgement of quality: The Australian Awards for Excellence in Educational Publishing. In M. Horsley & J. McCall, *Peace, Democratization and Reconciliation in Textbooks and Educational Media*. Ninth International Conference on Textbooks and Educational Media. IARTEM: Tonsberg, Norway.
- Horsley, M. (2011). *Investment in classroom teaching and learning materials: equity and access in providing classroom teaching and learning materials in Australian schools*. Australian Publishers Association: Sydney.
- Horsley, M. & Wikman, T. (2010). Australia and Finland: a comparison of textbooks and teaching and learning materials. *10th IARTEM Conference*. Santiago De Compostela: Spain.
- Mitra, D. L. (2008). *Student voice in school reform: Building youth-adult partnerships that strengthen schools and empower youth*. Albany, NY, State University of New York Press.

Wood, E. (2003). The power of pupil perspectives in evidence-based practice: the case of gender and underachievement. *Research Papers in Education*, 18(4), 365-383.

Interview Questions

What are the most important features of :

- a. textbook
- b. other teaching and learning materials ie kits, readers, cds, websites?

Illustrations

- 1. How important are illustrations for you when choosing a text to read?
- 2. How important are illustrations for you when reading a text?
- 3. What qualities make a good illustration?
- 4. How should a page be layed out to get the information you need out of it?

Depth of Knowledge

- 5. What advice do you think we could give to authors who write and publishers who make textbooks for young kids?
- 6. What strategies do you use when you encounter a text you can't understand?
- 7. What items in a textbook help you to navigate the stuff that is difficult?

Information

- 8. Does the way the information is communicated make it easier to learn or understand? How?

Interactive

- 9. How often do you access items from textbooks that have interactive links?
- 10. What are factors you consider before accessing a link to a website? Interest in subject matter? Time? Computer availability?

Text

- 11. Does the type font and its size affect how you read and comprehend a book?

Subject Matter

- 12. What subjects do you find interesting to read about?
- 13. Do your peers find similar subjects interesting?
- 14. How would a textbook make a difficult subject interesting to you?

Suitability of Others

- 15. What aspects of books do you think people like to look at without regard to age?

Biographical note

Jo Dargusch is a researcher at CQUniversity. Her doctoral research explored teachers' use of formative assessment in Senior English classrooms in Queensland schools. She has become involved in researching primary students' use of teaching and learning materials in classrooms. She presented a paper at the IARTEM conference in Lithuania on student voice in evaluating teaching and learning materials.

Nayadin Persaud is a Phd candidate at CQUniversity. She has worked as a research assistant on several research projects including: student voice in evaluating teaching and learning materials, as well as projects in nursing education collecting data from eye tracking and EEG technologies and aligning them. The focus of her doctorate is in the development of student self regulation in different learning environments.

Mike Horsley is the director of LTERC at CQUniversity and vice-president of IARTEM. He has been the chief judge of the AAEEP since 1994 and was the founder of the awards. He is well-known amongst Australian educational publishers.

Jo Dargusch
j.dargusch@cqu.edu.au

CQUniversity
Noosa Campus
PO Box 1128
Noosaville BC 4566 Qld